

- 55 -

WHAT IS CLAIMED IS:

1. An integrated mask comprising:

a plurality of deposition masks, each deposition mask having an array of deposition apertures formed in accordance with a deposition pattern; and

a base plate having a plurality of openings on which the deposition masks are arranged,

wherein the deposition masks are retained to the base plate by engaging units in a disengageable manner, and

wherein alignment marks used for positioning the deposition masks on the base plate are formed on the base plate.

2. An integrated mask according to Claim 1, wherein the engaging units disengage the deposition masks when an external force is applied.

3. A fabrication apparatus for the integrated mask according to Claim 1, comprising:

a table which supports the base plate;

deposition mask retaining-and-moving means which retains the deposition masks and freely moves the deposition masks relative to the base plate;

a positioning system which detects the alignment marks or reference positions of the base plate and the deposition masks and adjusts the relative position between the base plate and the deposition masks using

the deposition mask retaining-and-moving means; and disengaging units which disengage the deposition masks and the base plate.

4. A fabricating method for the integrated mask according to Claim 1, comprising the steps of:

supporting the base plate, on which the deposition masks are placed, on a table;

detecting the alignment marks or reference positions of the base plate and the deposition masks; and

adjusting the relative position between the base plate and the deposition masks by retaining and moving the deposition masks relative to the base plate; and

retaining the deposition masks on the base plate using the engaging units after the step of adjusting the relative position.

5. An organic EL device manufacturing method comprising the steps of:

positioning the integrated mask according to Claim 1 and a substrate to be subjected to a deposition process in a deposition chamber using the alignment marks of the integrated mask; and

patterning a thin film layer in the deposition process using the integrated mask, thereby forming n organic EL devices on a single substrate wherein n is an integer equal to or greater than 2.

6. An organic EL device manufacturing method according to Claim 5,

wherein the integrated mask is set up by retaining m deposition masks on the base plate wherein m is an integer in the range of 2 to n.

7. An organic EL device manufacturing method according to Claim 6, wherein m and k satisfy $n = m \times k$ (k is an integer in the range of 2 to n).

8. An organic EL device manufacturing method according to Claim 5, wherein the thin film layer is an emitting layer or a metal electrode layer.

9. An organic EL device manufactured by the organic EL device manufacturing method according to Claim 5.

10. An organic EL device manufacturing apparatus comprising:
a positioning apparatus used for positioning the integrated mask according to Claim 1 and a substrate to be subjected to a deposition process using the alignment marks of the integrated mask; and
a deposition apparatus used for patterning a thin film layer in the deposition process using the deposition mask.